

## CDBV0520 - CDBV0540

Voltage: 20- 40 Volts

Current: 0.5 Amp



### Features

Extremely Low Drop Down Voltage

Extremely Thin Package

Low Stored Charge

Majority Carrier Conduction

### Mechanical data

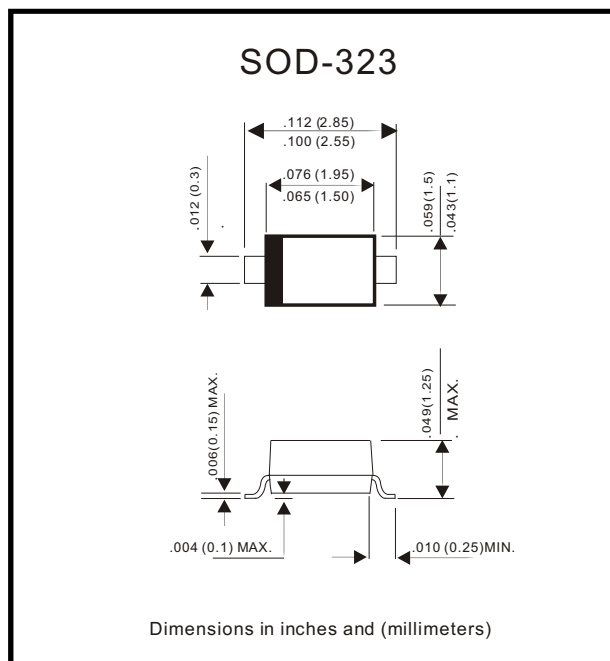
Case: SOD-323, molded plastic

Terminals: solderable per MIL-STD-750,  
method 2026

Polarity: Indicated by cathode band

Mounting position: Any

Weight: 0.0045 grams



### Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CDBV 0520	CDBV 0530	CDBV 0540	Unit
Max.RepetitivePeak Reverse Voltage	$V_{RRM}$	20	30	40	V
Max. DC Blocking Voltage	$V_{DC}$	14	21	28	V
Max. RMS Voltage	$V_{RMS}$	20	30	40	V
Peak Surge Forward Current 8.3ms single halfsine-wave Sine-wave superimposed on Rate load (JEDEC )	$I_{FSM}$	2.0			A
Max. AverageForward Current	$I_o$	0.5			A
Max. Forward Current at 0.1 A 0.5 A	$V_F$	0.31 0.43	0.36 0.47	0.36 0.47	V
Max. Reverse Current	$I_R$	0.10 @ $V_R=10V$ 0.25 @ $V_R=20V$	0.03 @ $V_R=10V$ 0.13 @ $V_R=30V$	0.03 @ $V_R=10V$ 0.13 @ $V_R=30V$	mA
Max. Thermal Resistance	$R_{\theta JA}$	426			°C/W
Operating junction temperature	$T_j$	-40 to +125			°C
Storage temperature	$T_{STG}$	-40 to +125			°C

Note 1: Thermal resistance from junction to ambient

## RATING AND CHARACTERISTIC CURVES (CDBV0520-0540)

Fig. 1 - Reverse Characteristics  
(CDBV0520)

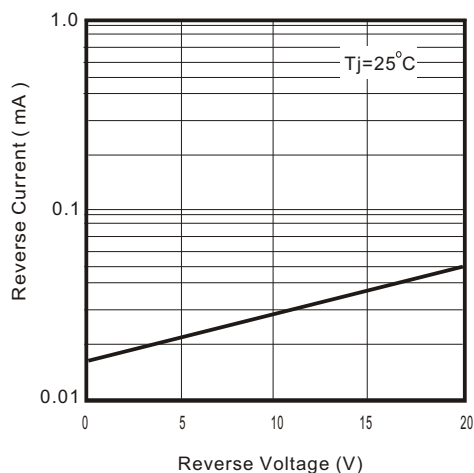


Fig. 1 - Reverse Characteristics  
(CDBV0530-0540)

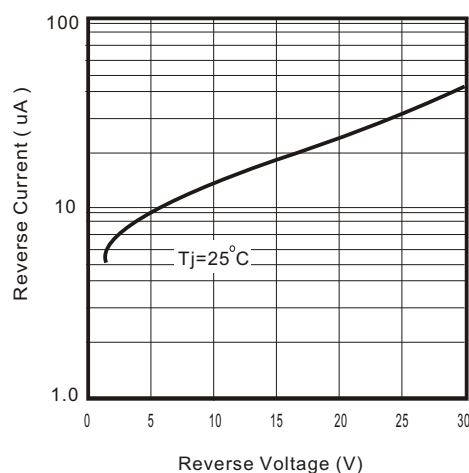


Fig. 3 - Forward Characteristics  
(CDBV0520)

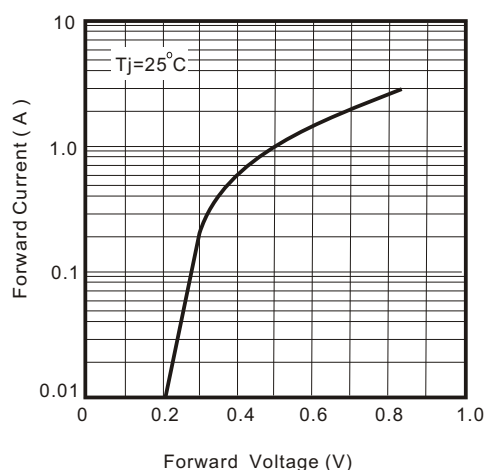


Fig. 4 - Forward Characteristics  
(CDBV0530-0540)

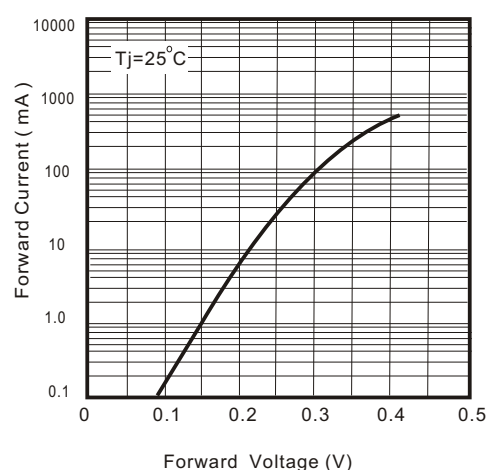


Fig. 5 - Capacitance Between  
Terminals characteristics

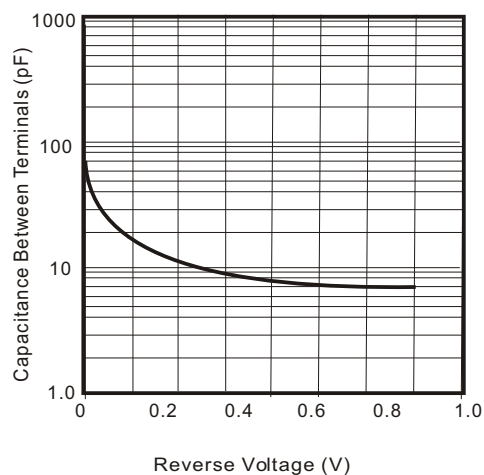


Fig. 6 - Current Derating Curve

